

Prepared Quarterly by the Forest & Business Analytical Services Unit of the Tennessee Department of Agriculture, Division of Forestry, P.O. Box 40627, Nashville, TN 37204; Phone: 615-837-5437, Fax: 615-837-5003

<a href="http://tn.gov/agriculture/forestry">http://tn.gov/agriculture/forestry</a>

A CONDENSED REPORT ON FOREST PRODUCTS, PRICES, SPECIFICATIONS, EQUIPMENT, UTILIZATION NEWS, ETC.



## Forest Inventory and Analysis – The Tree Census

The Directory of Tennessee's Forest Industries is produced as a part of a national program, known as Forest Inventory and Analysis (FIA), directed by the U.S. Forest Service to monitor the health and sustainability of America's forests. There was a very real concern in the late 19<sup>th</sup> and early 20<sup>th</sup> centuries that the U.S. would run out of forest and the wood produced by the forest. During that period of expansion across the continent, forests were cut and converted to cropland or rangeland. Permanent conversion of forestland to rangeland requires repeated burning and grazing to stop natural regeneration of the forest. As a result the McSweeney – McNary Forest Research Act was passed in 1928. This law authorized the Forest Service to

conduct continuing forest surveys of all states. Each year forests grow; some are harvested, others damaged by wildfire, insects, diseases and tornadoes; and some are cleared for agriculture, urban, and manufacturing uses. At the same time forests are planted, harvested areas regenerate naturally and old fields and pastures return to forests when no longer tilled. The FIA program's main goal is to determine if the level of output of forests can be sustained in the long run. Questions like "How many acres of forest are there in Tennessee?" and "Are forests being over-harvested?" can be answered by analyzing the data obtained through the FIA program.

The FIA program is much like the U.S. Census, population changes due to births and deaths, likewise the forest changes due to regeneration/growth and removals/mortality. Since it would be too expensive to count and measure every tree, basic information on the forest is collected by measuring trees on small sample areas with approximately one sample location for every 6,000 acres of land. For Tennessee this amounts to about 5,000 samples or plots as they are called by foresters. Each year, one fifth of these plots are visited by a forester who measures the diameter and height of each tree. Non-forest locations are also visited to quantify rates of land use change. Data is collected, analyzed and reports published by the U.S. Forest Service. The last report on Tennessee's forests was published in 2012 but the data came from 2009. This means that the current published information is about 5 years old. Instead of relying on dated published reports, more current data can be accessed through a website know as Forest Inventory Data Online (FIDO) which can be found at: <a href="http://apps.fs.fed.us/fia/fido/index.html">http://apps.fs.fed.us/fia/fido/index.html</a> (designed for Internet Explorer or Mozilla, but not Google Chrome). The user selects the state or region; type of report such as area, tree counts or volume; the year, and constraints or filters such as ownership or land productivity. For example by selecting: Tennessee as the region of interest, standard report 2.1 – Area, in acres, by ownership class and reserved status, Survey Year as 2012, and no filter; a report is generated that gives the total forest area as 13,920,504 acres with 550,381 acres reserved from timber harvest. Report 25.1 Average annual net growth of live trees (at least 5 inches d.b.h./d.r.c.), in cubic feet, by species group and owner class gives the growth for the same year as 656 million cubic feet (d.b.h. and d.r.c. refer to where a diameter is measured, d.b.h. is diameter breast height and d.r.c. is diameter root collar.) Combining this information, growth per acre was about 47 cubic feet per acre in 2012. Net growth indicates that mortality has already been removed from the reported figures. Figure 1 depicts net growth by species groups. Approximately 77% of growth in 2012 was in commercial hardwood species.

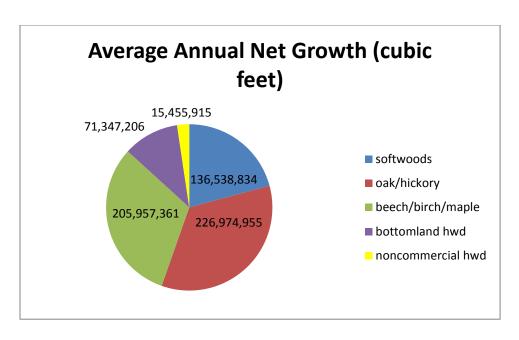


Figure 1. Net Growth by Species Groups

For measuring removals and mortality, the FIA program uses aerial and satellite imagery to determine how many acres of forestland are being affected by harvesting, land clearing, wildfires, storms, insects and diseases along with information from plots. Since landowners do not know exact plot locations, when trees on FIA plots are harvested along with the rest of the forest, this information is recorded and reported as a removal. By going to the above website, and selecting Standard Report 39.1 Average annual removals of live trees (at least 5 inches d.b.h./d.r.c.), in cubic feet, by species group and owner class data from FIA plots give total removals in 2012 as 455 million cubic feet.

With growth at 656 and removals of 455 million cubic feet, the annual growth to removal ratio in 2012 was 1.4 to 1 as shown in Figure 2.

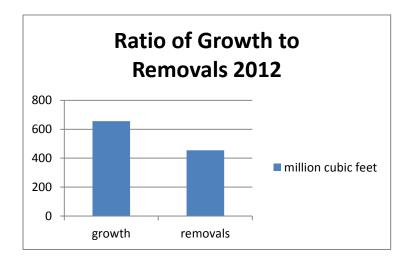


Figure 2

With only 1,000 plots measured each year across the state, not enough information is gathered to accurately estimate annual volume removals on a county basis. To improve the accuracy of removal data, all primary wood-using industries in Tennessee are surveyed periodically in what is known as the Timber Product Output (TPO) study. A questionnaire is delivered by TDF personnel or mailed to each mill. Questions include mill location, type of mill, volume of roundwood received by species and geographic origin, type of equipment and products produced. Types of TPO roundwood being reported includes saw logs, veneer logs, pulpwood, fuelwood, post-poles and pilings, and assorted other industrial uses of logs. Reports are then produced that give the average consumption of roundwood by county and region, production of lumber and other products by region and annual timber product drain. The TPO database has been made available at this website: http://srsfia2.fs.fed.us/php/tpo 2009/tpo rpa int1.php and users can process reports to answer questions. By selecting all counties in Tennessee with a report year of 2009, and units in thousand cubic feet, a report is produced with a number of related tables. For example, Table 1B gives total industrial use of roundwood as 268 million cubic feet. Running the FIDO Report 39.1 again but for 2009, gives annual removals of 450 million cubic feet. The difference between 450 and 268 million cubic feet can be attributed to errors in data gathering, land use conversion, wood exported to other states, and wood going to non-commercial or non-industrial uses.

Printed TPO directories are about as useful as paper Sears & Roebucks Catalogues which are no longer distributed. People have found that using online internet searches are a better and much faster way to get the needed information. Data now being collected for the TPO database for primary mills in Tennessee are being tested in an online map that will be made available publicly as soon as all the data on mills have been collected and checked for accuracy. The map will allow real time updates as opposed to a static printed catalog. A test version of this website is shown in Figure 3 for an area in Hardin and Wayne Counties. The map interface has been developed in ArcGIS Online. The user can click on any icon and obtain contact information, type of mill, and number of workers employed by the mill. This website should be available to the public this fall.

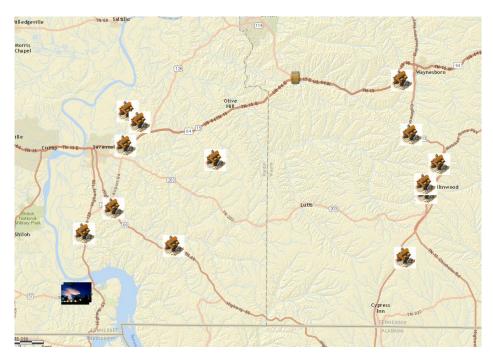


Figure 3. ArcGIS Online Map of Primary Wood Processing Facilities South Central Tennessee

For additional information please contact Kerry Livengood, Forest and Business Services Analyst, at <a href="mailto:kerry.r.livengood@tn.gov">kerry.r.livengood@tn.gov</a> or by phone at 615-837-5437

## **Delivered Forest Product Prices in Tennessee**

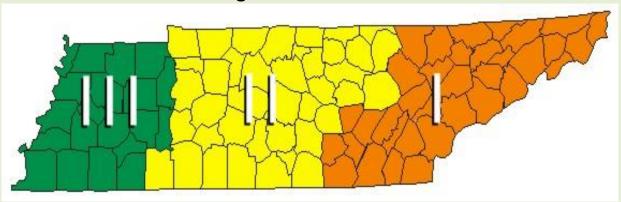
## January - March, 2014

Product	Specifications**	Prices	Region
Cedar Logs	Length-6' to 12' and min DIB 4" at small end	\$61 to \$88/ metric ton (also \$66 to \$88+ cubic meter)	II & III
Crosstie Logs	Length-8' 8"min DIB (diameter inside bark) 11" and up Must be sound on both ends	Oak Grade 1: \$87/cubic meter Grade 2: \$66/cubic meter  Mixed Hardwoods \$44 to \$66/ metric ton Grade 1: \$74/cubic meter  Grade 2: \$55/cubic meter	I, II & III
Hickory Handle Logs	Each mill will have its own requirements. Better/different than Hickory sawlogs on page 4.	Grade 1: \$88/cubic meter Grade 2: \$44/cubic meter Grade 3: \$33/cubic meter	I & II
White Oak Stave Logs	White Oak-Length: 8 ½' min and add on 2' increments (allow 1 knot per 3' of length", and min. DIB 12"at small end)	Grade 1: \$232+/cubic meter Grade 2: \$188+/cubic meter Grade 3: \$155+/cubic meter	I & II
Paulownia Logs	Min. length 2 meters + trim allowance (6' 6"+trim) and Min. DIB 8" at small end (Must be slow grown – prefer 8-10 growth rings per inch); season Oct- April	Grade 1 \$188/ cubic meter	I, II III
Pine Pulpwood	Pine: Diameter, length, and species may vary with purchasing company. Consult firm first before cutting	\$29/metric ton (Gatewood Price)	II & III
Hardwood Pulpwood	Hardwood: Diameter, length, and species may vary with purchasing_company. Consult firm first before cutting	\$29/metric ton (Gatewood Price)	1, 11 & 111

Softwood Logs	Length: 8'-16' and min DIB 6" at small end	SY Pine: \$28/cubic meter White Pine: \$50/cubic meter Hemlock: \$40/cubic meter SY Pine CNS: \$28/ton SY Pine Sawlog: \$39/ton	I & II
Veneer Logs	Prime logs only (specifications vary with buyer).  Season: Oct to April	Red Oak: Average \$224+/cubic meter White Oak: Average \$259+/cubic meter Walnut: Average \$416-/cubic meter Cherry Average \$228+/cubic meter Poplar Average \$114-/cubic meter	I, II & III

<sup>\*</sup>Information is taken from a survey of randomly selected wood-using industries in Tennessee

## **Regions of Tennessee**



<sup>\*\*</sup>Specifications vary with industries

<sup>\*\*\*</sup>All prices are regional averages and are delivered prices per cubic meter unless otherwise indicated. They are subject to change and will vary locally. ("+" indicates an increase since our last bulletin; "-" indicates a decrease)

# **Hardwood Sawlogs\***

Species	Region I	Region II	Region III
Red Oak	Grade 1: \$126+ Grade 2: \$97+ Grade 3: \$36-	Grade 1: <b>\$136+</b> Grade 2: <b>\$101+</b> Grade 363-	Grade 1: <b>\$174+</b> Grade 2: <b>\$134+</b> Grade 3: <b>\$97+</b>
White Oak	Grade 1: \$130+ Grade 2: \$94+ Grade 3: \$36-	Grade 1: <b>\$144+</b> Grade 2: <b>\$105+</b> Grade 3: <b>\$66-</b>	Grade 1: <b>\$167+</b> Grade 2: <b>\$118+</b> Grade 3: <b>\$83-</b>
Ash	Grade 1: \$80- Grade 2: \$55- Grade 3: \$29+	Grade 1: <b>\$114+</b> Grade 2: <b>\$73</b> Grade 3: <b>\$72+</b>	Grade 1: <b>\$135+</b> Grade 2: <b>\$105+</b> Grade 3: <b>\$66+</b>
Yellow Poplar	Grade 1: \$68+ Grade 2: \$46 Grade 3: \$22-	Grade 1: <b>\$81+</b> Grade 2: <b>\$61+</b> Grade 3: <b>\$53+</b>	Grade 1: <b>\$89+</b> Grade 2: <b>\$71+</b> Grade 3: <b>\$53+</b>
Walnut	Grade 1: \$+132 Grade 2: \$70 Grade 3: \$+33	Grade 1: \$-181 Grade 2: \$127 Grade 3: \$108+	Grade 1: <b>\$270+</b> Grade 2: <b>\$188+</b> Grade 3: <b>\$116+</b>
Cherry	Grade 1: \$72- Grade 2: \$48- Grade 3: \$31+	Grade 1: \$132+ Grade 2: \$82+ Grade 3: \$64+	Grade 1: <b>\$127+</b> Grade 2: <b>\$88+</b> Grade 3: <b>\$61-</b>
Hard Maple	Grade 1: \$103+ Grade 2: \$72+ Grade 3: \$40+	Grade 1: <b>\$154+</b> Grade 2: <b>\$116+</b> Grade 3: <b>\$80+</b>	Grade 1: <b>\$171+</b> Grade 2: <b>\$143+</b> Grade 3: <b>\$77-</b>
Hickory	Grade 1: \$46- Grade 2: \$48- Grade 3: \$29-	Grade 1: <b>\$91+</b> Grade 2: <b>\$76+</b> Grade 3: <b>\$62+</b>	Grade 1: <b>no data</b> Grade 2: <b>\$110+</b> Grade 3: <b>\$72+</b>
Miscellaneous Hardwoods	Average: \$33-	Average: \$33-	Average: \$59-

\*Specifications: (Length: 8'-16'; and Min. DIB 8 " at small end)
Prices quoted are per cubic meter delivered to mill

Increase from last quarter (+); Decrease from last quarter (-)



#### Wanted to Buy:

- ❖ Loblolly or shortleaf pine for utility poles: 36 foot to 76 foot in length (length is determined by diameter). Roadside pricing. Call Doug Curry, Bell Timber for specifications and details. 715-418-9333.
- ❖ Logs for Export: An exporting company based out of Southern Illinois is interested in buying veneer logs for export. Any information or bid proposals can be e-mailed to <a href="mailto:swsveneer@gmail.com">swsveneer@gmail.com</a> or call Derek Wilson at 618-559-7568.

### For Sale:

❖ SCHAEFER ENTERPRISES OF WOLF LAKE, INC —Rely on our experience, established in 1967. Used Parts Shipped Daily for Log Skidders, Crawlers, Loader Backhoes, Excavators, Wheel Loaders and Skid Steers. We have many reconditioned engines and transmissions that are Dyno-Tested. Rebuilt winches, final drives and used tires. If we do not have a part — we can locate it for you on one of our three nationwide parts locators. Contact a parts professional at: (618) 833-5498 or (800) 626-6046. We are located at 4535 State Route 3 North, Wolf Lake, IL 62998. Check out our inventory at — <a href="www.sewlparts.com">www.sewlparts.com</a> or you may send email requests to parts@sewlparts.com.

### Other:

- \* "Logs, Chips and Lumber Trucking Company: West Tennessee company specializes in providing trucking services for area loggers, sawmills and papermills located within a 100 mile radius of Paris, TN. We currently have 20 trucks and over 60 trailers in our fleet for quick "drop and hook" service. Flatbed Trailer and Live Floor Chip Trailer services also available. Fully licensed, bonded and insured. Competitive rates. References available. Call Revel Logging, LLC at 731-642-3944 for more information. "
- ❖ "ATTENTION LOGGERS! "Waverly Wood, LLC" of Waverly, TN is looking to employ additional logging crews, to log their timber tracts; long-term employment possible. All prospective contractors must have workers' compensation and general liability insurance. Also, wanting to buy white oak stave logs and tie logs. Please contact: Dennis Ulrich, Timber Procurement Manager (Office: 931-296-1455; Mobile: 931-209-6455)

The Tennessee Forest Products Bulletin welcomes those items that you are looking to buy or sell in The Trading Post. Contact Debra Dawson: <a href="mailto:Debra.Dawson@tn.gov">Debra.Dawson@tn.gov</a>; 615-837-5540; 615-837-5003 (Fax) with your submissions.